



New Hampshire Geological Survey's Annual Geologic Mapping Workshop 2011

Tuesday March 15, 2011

9:00 AM – 12:30 PM**

DES Auditorium, NHDES, Concord

29 Hazen Drive, Concord, New Hampshire 03302-0095

Public Session Agenda

- 8:30 – 9:00 AM **Coffee and Donuts and Poster Session***
STATEMAP product maps on display
- 9:00 – 9:10 **Welcome and NHGS Program Update:**
Rick Chormann, Interim NH State Geologist – Programmatic Update
- 9:10 – 9:35 **Guest speakers:**
Joe Kopera, Massachusetts Geological Survey - *"Embracing the Digital Revolution: Issues of Concern to Geologic Surveys."* Computers and digital technology has become a wonderful tool for streamlining the mapping process and manipulating data in ways otherwise tedious and unimaginable prior to computers. From a systems-sustainability view, however, having data only in digital form creates a whole new host of concerns and dangers with regards to data accessibility, long-term integrity, storage, infrastructure, and maintenance that have been non-issues when it comes to analog data. This talk discusses some of the major problems with digital media and offers solutions for data-providers to embrace digital technology without being burned by it down the road.
- 9:35 – 10:20 **Woody Thompson, Maine Geological Survey**– *"Continental Glaciation in the White Mountains, NH."* The Laurentide Ice Sheet obliterated much of the evidence of earlier glaciation in the White Mountains, but it also left a rich legacy of sedimentary deposits as the ice receded. The best stratigraphic record of late-glacial events is preserved in valleys that drain north or west and were blocked by the retreating ice margin. A regional deglaciation map has been prepared for part of the Mt. Washington 100,000-scale sheet, showing ice-margin positions, the extent of glacial lakes, and other data.
- 10:20 – 10:30 **Break**
- 10:30 – 10:50 **Peter Thompson, UNH** - *"Mapping the bedrock of the Boston Harbor Islands: a geologist's delight, a landlubber's headache."* Brief discussion of the logistics of

mapping oceanic islands populated by nesting birds, followed by preliminary results, which widen our understanding of the depositional setting and structure of the Boston Bay Group: argillites with Ediacaran fossils, conglomerates, diamictites and volcanics intruded by diabase, basalt and felsite dikes and sills of unknown age.

- 10:50 – 11:10 **Joe Kopera** – *"Don't Take Those Coordinates as Gospel! A Cautionary Tale of Using GPS for Production Mapping."* Over the years many mappers have noticed that the budget-priced GPS units they use (i.e., Garmin E-Trex) are not as accurate as they claim to be. It turns out they are quite accurate, but many use outdated and oversimplified methods of converting between coordinate systems and geographic datums, resulting in huge errors. This is an anecdotal story of how mappers at the Massachusetts Geologic Survey discovered this the hard way, how their contingency plan saved them, and what you can do to avoid the same pitfall.
- 11:10 – 12:30 **Mappers Reports on Surficial and Bedrock Maps completed in 2010 by the NHGS at 1:24,000 scale:**
- Deering Quadrangle Surficial Map (Carl Koteff)
 - Greenville Quadrangle Bedrock Map – (Charles Kerwin)
 - Hartland and North Hartland Quadrangles, Surficial Maps (Carol Hildreth)
 - Holderness Quadrangle Surficial Map (Dan Tinkham, Emery Garrett Groundwater Inc.)
 - Mt. Washington East Quadrangle Surficial Map – (Brian Fowler)
- 12:30 **Questions and closing remarks**
Rick Chormann, Interim NH State Geologist
- *Private Working Session for NHGS Mappers in DES Rm. 110C**
- 1:15 – 2:30 Mapping contractor meeting for those who map for the NHGS under the STATEMAP program.

*Posters will be on display throughout the workshop in the break area

** NHDES employees should confirm their attendance and schedule of the workshop with their supervisors

Directions to NH Department of Environmental Services
The main offices of DES (including the New Hampshire Geological Survey)
are located at 29 Hazen Dr, Concord, NH.

From the South and West

Take I-93 north to Exit 14 turning right at the end of the exit ramp. At the third light (at top of the hill) turn left onto Hazen Drive. Turn left at sign for Health & Human Services. Visitor parking is available in front of building.

From the North

Take I-93 south to Exit 15E onto I-393. Take Exit 2 and turn left at end of exit ramp (East Side Drive). Stay to the right and turn right at light onto Hazen Drive. Turn right at sign for Health & Human Services. Visitor parking is available in front of building.

From the East

Take Route 4 west to Concord (Route 4 becomes I-393 in Concord). Take Exit 2 and turn left at end of exit ramp. Stay to the right and turn right at second light onto Hazen Drive. Turn right at sign for Health & Human Services. Visitor parking is available in front of building.

Note: Those planning to attend need to pre-register by contacting NHGS by email: geology@des.nh.gov, or by calling 271-1976

Attendance for the public session part of the workshop is worth up to 3.5 CEU's and for the private session part of the workshop up to 1.5 more CEU's